

November 10, 1999

Solutia Inc.

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Mr. Michael McAteer
U. S. EPA - Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

Re: Sauget Sites Area I - January 21, 1999 Administrative Order by Consent (AOC)

• November 1999 Monthly Report

Dear Mr. McAteer,

Enclosed is the November 1999 Monthly Report for the Sauget Sites Area I. This submittal is in fulfillment of the monthly requirements of Section 2.4 Reporting, of the January 21, 1999 Final Administrative Order by Consent for Sauget Sites Area I, Sauget and Cahokia, Illinois.

Sincerely,

D. M. Light

Manager, Remedial Projects

Solutia Inc.

cc:

T. Gouger - USACE

C. Morin - IEPA

Mayor M. King - Cahokia

Sauget File - Solutia

Sauget Sites Area I - Sauget, Illinois

AOC - **EECA / RIFS**

Monthly Report

Date of Report:

November 10, 1999

Period Covered:

October 1 - October 31, 1999

Next Report Period:

November 1, 1999 - November 30, 1999

Work Performed during the reporting period

- 1. Completed waste borings on Site H, G, L and I. Conducted fill area soil gas and magnetometry surveys. Collected surface soil samples at boring locations.
- 2. Waste samples collected at Site M.
- 3. Leachate wells installed at Sites I & G.
- 4. Ecological sediment sample collection completed for Dead Creek, Site M, Borrow pit, RA1 and RA2.
- 5. Surface water sample collection completed for Dead Creek, Site M, Borrow Pit, RA1 and RA2. Creek Segment C had 3 stations with no water. Creek segment E had 2 stations with no water.
- 6. Completed domestic well water sampling. Sampled the following residents' wells: Schmidt, Wright, Settle and McDonald all located on Judith Lane.
- 7. Completed installation of the nine piezometer well clusters. Continued taking groundwater level readings in existing wells and newly installed piezometers.
- 8. Grain size analysis samples collected at water table, and at 40' & 60' below grade, adjacent to fill areas.
- 9. Completed magnetometry surveys on Sites H, G, L and N. Partially completed on I (See "Problems" section).
- 10. Located all existing fill area wells. Eleven of the 19 wells are usable. Will install geoprobes in place of the unusable wells.
- 11. Completed the initial soil gas survey using MIP on Sites H, L, G, H & I(partial).
- 12. Completed layout of the soil sampling transects for developed and undeveloped surface and shallow subsurface soil samples.
- 13. Fish sampling was completed.
- 14. Collected benthic macroinvertebrates for tissue analysis one composite sample per creek segment plus Site M, Borrow pit and two reference locations. There were no invertebrates large enough to provide body mass were available in creek sectors E or F and in Site M.
- 15. Completed collection of benthic invertebrates for community evaluation.
- 16. Completed collection of sediment samples from 23 locations for acute and chronic toxicity bioassays.

17. Collected composite sampling from creek sectors B through F, the borrow pit, and two reference areas.

Work scheduled for next reporting period

- 1. Complete the magnetometry survey of Site I (Cerro property access issue).
- 2. Collect groundwater samples from the former screened interval of the damaged fill area wells EE-02, EEG-103, EEG-105, EE-12, EE-13, EE-14, EE-15 and EEG-111.
- 3. Collect downgradient alluvial aquifer samples.
- 4. Complete soil gas surveys using MIP.
- 5. Test trenching and waste borings on Site N.
- 6. Grain size analysis adjacent to Site N.
- 7. Collect soil samples along all 7 transects.
- 8. Sample collection for treatability studies.
- 9. Second attempt to collect upgradient alluvial samples at EE-04 (100'), EE-20 (60' & 100') and EEG-108 (60' & 100').

Problems and Solutions

- Boundary Trenching and Center Trenching on Site I will be delayed because of Cerro Copper's refusal to grant access (see Note 1). Final completion schedule may be delayed.
- Magnetometry survey on I delayed because of difficulty in getting Cerro's parked removed.
- Encountered difficulty in obtaining upgradient alluvial aquifer samples from upgradient wells EE-04, EE-20 and EEG-108 (ex. the 60 ft level at EE-04). Looking at new methodology to obtain the samples.

Submittal Schedule Status (see attached)

Attached schedule revised consistent with approved SSP.

Issues under review

- **<u>Dead Creek Flooding</u>** No change in this report period.
 - A hydraulic study of Dead Creek has been completed. Preliminary results indicate that elimination of the restricted culverts will not appreciably affect the flooding conditions. A supplemental study was completed and submitted to the Agencies on July 30 for review.
- <u>UAO to address flooding</u> U. S. EPA UAO Docket No. V-W-99-C-554 was issued to Solutia and received June 28, 1999. The UAO requires replacement of the culverts on Dead Creek to address flooding of Dead Creek. An alternative proposal to address the cause of the flooding and the contaminated sediments directly was made to U. S. EPA by Solutia July 8 at a conference in Cahokia. This proposal was formally submitted to U. S. EPA in Solutia's July 17, 1999 Response to the UAO. As

committed to in the July 8 Cahokia conference and repeated in Solutia's July 17, 1999 Response, Solutia submitted to U.S. EPA in a July 30, 1999 correspondence, commitment to implement some additional short term plans to address the flooding and the sediments under the UAO. The Agency responded to Solutia's proposals in a September 24, 1999 letter. In summary, the Agencies approved replacement of the culverts at Cargill Road and the Terminal Railway ROW; requested a work plan for the proposed installation of facilities to pump water from Sector B to the American Bottoms Treatment plant; and agreed conceptually and requested additional discussions and information on the proposal to remove contaminated sediments from Sector B and contain in an on-site double lined containment cell.

This Report Period

Solutia met with U. S. EPA representatives in Chicago on October 19, 1999 to discuss the potential acceptability of, and some design parameters, for a double lined containment cell to contain the sediments from Sector B on-site. Attending for the Agency were Mike McAteer, Steve Johnson, Tim Gouger and Tom Martin (via phone). Attending for Solutia were Mike Light, Linda Tape, Bruce Yare and Richard Williams. Following the meeting and consistent with the discussions in the October 19 meeting, Solutia committed in an October 26, 1999 correspondence to U. S. EPA to (1) a November 8 date for submittal of an evaluation of alternatives to an on-site containment cell for dealing with the contaminated sediments; and (2) to a December 3 date for submittal of an on-site containment cell design.

Solutia also formally responded to the Agency's September 24 correspondence on the UAO on October 30, agreeing to begin immediately to perform the culvert modifications and recommending to: (1) proceed and focus on project development and approval of the on-site containment cell proposal - which will expeditiously remove the source of the contaminated sediments - and (2), postpone the installation of facilities to pump storm water from Sector B because of technical and regulatory encumbrances.

Comments:

January 21, 1999 Sauget Area I AOC SCHEDULE

(11/99 Revision)

1. Designation of Contractor	Completed 3/10/99 ¹
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2. Designation of Other Contractors 5 Business Days Before Start

of Work

3. Designation of Project Coordinator Completed

4. Submit Support Sampling Plan (SSP) Submitted February 22, 1999

5. Submit Revised SSP April 8, 1999²

June 25, 1999³ August 13, 1999⁴

September 9, 1999⁵ Approval

6. Obtain Access Agreements July 1, 1999⁶

Sampling Plan (QAPP)

September 17, 1999⁷ October 1, 1999⁸

7. Submit Health and Safety Plan (HASP) Approved September 9, 1999

8. Submit Quality Assurance and Approved September 9, 1999

¹ Per March 10, 1999 memo DML to M. McAteer re "Notification of Contractors and Contractor Qualifications"

² Per 3/19/99 e-mail from M. McAteer to M. Light, AOC schedule modified to "21 days after receipt of U. S. EPA comments from the February 22, 1999 SSP submittal". U. S. EPA comments on the 2/22/99 SSP submittal were received 3/19/99. Revised SSP submitted to U. S. EPA April 8, 1999 and disapproved June 3, 1999.

³ April 8, 1999 SSP submittal disapproved June 3, 1999. Revised plan due to the Agency June 25, 1999. Revised plan submitted June 25th as required.

⁴ June 25th SSP submittal disapproved July 16, 1999 and resubmitted August 13, 1999.

⁵ August 13, 1999 SSP submittal as revised August 30, 1999 and September 7, 1999 received final Agency approval on September 9, 1999.

⁶ Per 5/21/99 phone call from M. McAteer to M. Light, AOC schedule modified to "July 1, 1999 with interim report due on June 15, 1999", consistent with Solutia's request in a May 18, 1999 Access report and request for extension.

⁷ Access agreements update issued August 15, 1999 with request to extend deadline to September 17, 1999. Extensions to September 17, 1999 was granted by Mike McAteer in an August 17, 1999 e-mail to Mike Light.

⁸ Access agreements update issued September 17, 1999 with request to extend deadline to October 1, 1999. Extensions to October 1, 1999 was granted by Mike McAteer in a September 21, 1999 e-mail to Mike Light

January 21, 1999 Sauget Area I AOC

SCHEDULE (Cont.) (11/99)

9. Sampling Notification	10 Business Days Prior to Start of Work ⁹
10. Submit Data Report	01/09/01 ¹⁰
11. Submit EE/CA Report	60 Calendar Days After Data Report Submittal - 03/09/01
12. Submit Revised EE/CA Report	21 Calendar Days After Receipt of EPA Comments
13. Submit RI/FS Report	90 Calendar Days After Data Report Submittal - 04/09/01
14. Submit Revised RI/FS Report	21 Calendar Days After Receipt of EPA Comments
15. Progress Reports	Monthly Beginning February 19,

1999¹¹

⁹ Notification given on August 19, 1999 that Air Sampling will begin on September 7, 1999. Per 9-2-99 phone conversation with Mike McAteer, the 10 day notification requirement can be treated as a "Day 1"

requirement only, which has already been met.

10 Per SSP - 16 mo. from SSP approval date of 9/9/99.

11 Pursuant to decisions in 9-1-99 EPA Kickoff Meeting - Report period for the monthly report will be changed to the calendar month to coincide with project field work - due on the 10th of the month.